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CAPONS  
AND  
CAPONIZING



**C**APONS, castrated male chickens, make very choice poultry meat.

A capon brings a better price per pound than a cockerel. Its more contented disposition and its physiological condition permit it to make somewhat better growth.

The Plymouth Rock, Jersey Giant, Light Brahma, Rhode Island Red, Wyandotte, Langshan, Orpington, and various crosses of these breeds make desirable capons.

Cockerels are caponized when they weigh from 1½ to 2 pounds, or when they are from 2 to 3 months old.

Caponizing can be done with very little danger of killing the birds after some practice in performing the operation has been acquired.

The production and preparation of capons for market, with details concerning methods and results, are described in this bulletin.

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# CAPONS AND CAPONIZING

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CAPONIZING and capon raising, while their practice has increased somewhat in the United States in the last 30 years, are not so common in this country as in some others. Probably more capons are raised and consumed in France than in any other country. Capon raising is especially popular in the United States in that section of New Jersey east of Philadelphia, Pa. It is also practiced to some extent on general farms in other States on the Atlantic coast and in the Central and North Central States.

## CHARACTERISTICS OF THE CAPON

A capon is an altered or castrated male chicken. As with other male animals so altered, the disposition of the capon differs materially from that of the cockerel. He no longer shows any disposition to fight, is much more quiet and sluggish, and is more docile and easy to keep within bounds. The true capon seldom crows. Along with this change in disposition there is a change in appearance. The comb and wattles cease growing. This change causes the head to appear abnormally small. The hackle, tail, and saddle feathers grow very long, giving the bird an appearance of being profusely feathered.

As a result of the operation the capon develops more uniformly and grows to a slightly greater size than does a cockerel. The common idea that capons grow either much more rapidly or very much larger than cockerels is erroneous so far as their early development is concerned. In fact there is little difference in their relative size up to 5 or 6 months of age, but after that time the capons gradually outgrow the cockerels and fatten more readily. Since capons are very peaceable, they may be kept together in fairly large flocks without the fighting that occurs in flocks of cockerels. The greatest advantage in raising capons is the better price per pound received for them. With their greater weight, this higher price gives a much greater value to the capons at marketing time.

<sup>1</sup> Rob R. Slocum, author of this bulletin in its original form, resigned from the bureau in October, 1921.

The flesh of cockerels begins to get hard when the birds are large enough to show pronounced spur and comb development. They are then called stags. After cockerels are a year old they are classed as old cocks and bring comparatively low prices.

Before attempting to caponize cockerels which are to be raised and fattened for sale, the beginner should make a careful study of local demands and also consider the advisability of shipping to markets where capons bring the best prices. The demand for broilers in early spring should also be considered. In many cases it may be advisable to caponize only the late-hatched cockerels and fatten them for the late-winter markets.

### SELECTION OF BREEDS

Good size and fairly rapid growth are the characteristics most sought in determining the best breed for caponizing. Large capons bring the best prices. Breeds with yellow legs and skin are preferred as is true of other classes of market poultry but it does not pay to caponize small fowls such as Leghorns. The Plymouth Rock, Jersey Giant, Light Brahma, Rhode Island Red, Wyandotte, Langshan, and various crosses of these breeds are generally used and make good capons. The Orpingtons also make good capons but their white legs and skin make them less desirable for markets in this country. The Brahmas, Jersey Giants, and Langshans make the largest capons but take longer to develop than do Plymouth Rocks, Rhode Island Reds, and Wyandottes which, though smaller, are the breeds most used as capons.

### WHEN TO CAPONIZE

The best time to caponize chickens is early in the summer. Cockerels weighing from  $1\frac{1}{2}$  to 2 pounds, or that are from 2 to 3 months old, should be used. The lower age and weight limits apply particularly to the medium-sized breeds, while the higher limits apply to the larger breeds. Although larger or older cockerels may be caponized, the operation on them is much more difficult and the beneficial effects on growth and quality of flesh are much less. Since capons are in greatest demand from the beginning of the Christmas season to the end of March, and since from 8 to 11 months are required to grow and finish capons properly, it is important that the chicks to be caponized should be hatched in the spring so that they will be of proper size for caponizing in June, July, and early August.

### CAPONIZING INSTRUMENTS

Various kinds of caponizing instrument sets are manufactured, the important difference between them being in the forceps used in removing the testicles. Types of caponizing instruments most generally used are shown in Figure 1. With good forceps it should be fairly easy to get hold of the whole testicle so that this organ may be readily torn or twisted from the attached membrane without breaking any part of the testicle.

Figure 1, A shows a type of forceps with curved handles which allow greater visibility into the body cavity when removing the

testicle. Both types A and B consist of two hinged arms which have differently shaped ends for grasping the testicle. In use, the forceps are opened and the ends closed over the testicle, the handles then being either locked or held in place by a rubber band. The type shown at C is also used to grasp the testicle in a somewhat similar manner but does not have a lock on the handle. Another type of

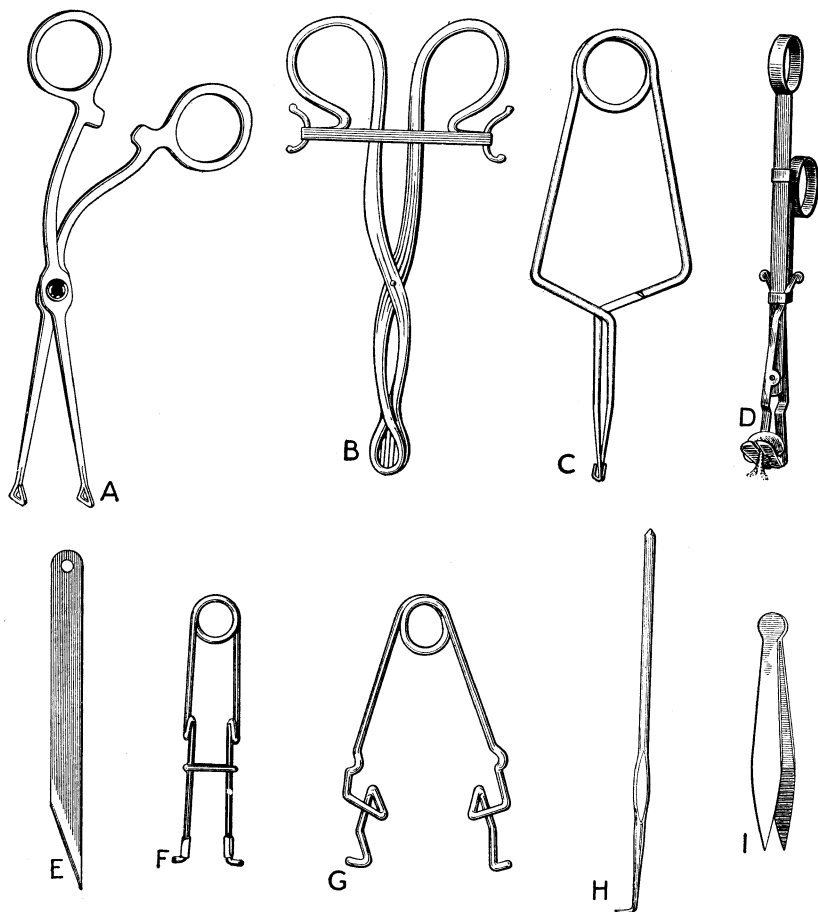


FIGURE 1.—Instruments used in caponizing: A, B, and C, forceps used in removing testicles; D, another type of forceps which is regulated by a slide; E, knife used for making the incision; F and G, spreaders for holding ribs apart; H, sharp-pointed hook for tearing away the thin membranes; I, tweezers for use in removing foreign matter

instrument (D) has two scoop-shaped jaws regulated by a slide. The testicle is caught in the scoop so that the spermatic cord which holds the testicle is between these jaws. After the testicle is grasped in this manner the jaws of the forceps are tightened and the forceps withdrawn carefully until this cord is severed, thus removing the testicle.

A sharp-pointed, thin-bladed knife (E) is used for making the incision. Two types of spreaders used to spring the ribs apart are

shown. (F and G.) A sharp-pointed hook (H) is used to tear away the thin membranes and its blunt end is used as a probe for pushing aside the intestines. Tweezers (I) are used to pick out foreign material that may fall into the body cavity. This is all the equipment needed for the operation.

#### THE OPERATION OF CAPONIZING

Before the operation the cockerels should be kept without feed and water for at least 24 hours so that the intestines will be almost empty. It is better for a beginner to allow a longer fasting period, say from 28 to 36 hours. Very good light is necessary when operating



FIGURE 2.—Barred Plymouth Rock cockerel of size suitable for caponizing

in order that the organs of the bird may easily be distinguished. Direct sunlight is best although a strong electric light, with a reflector, may be used if the work is done indoors.

#### HOLDING THE CHICKEN

A barrel or box is used as an operating table. (Fig. 2.) The cockerel is securely fastened with a noose of cord placed around the legs and another over the wings close to the shoulder joints, and weights heavy enough to hold the bird are attached to these cords. The weights are so placed that they keep the bird well stretched out. (Fig. 3.) The weights may be hung over the edge of the barrel or box, or suspended beneath a table in which holes have been bored at suitable places for the cords. These cords should be easy to adjust, and should be so arranged that the bird can easily be turned over without removing the weights.

## DETAILS OF THE OPERATION

After the operation is begun the work should be completed as quickly as possible. Moisten and remove the feathers from a small area over the last two ribs just in front of the thigh. (Fig. 4.) With the left hand slide the skin and flesh down toward the thigh.

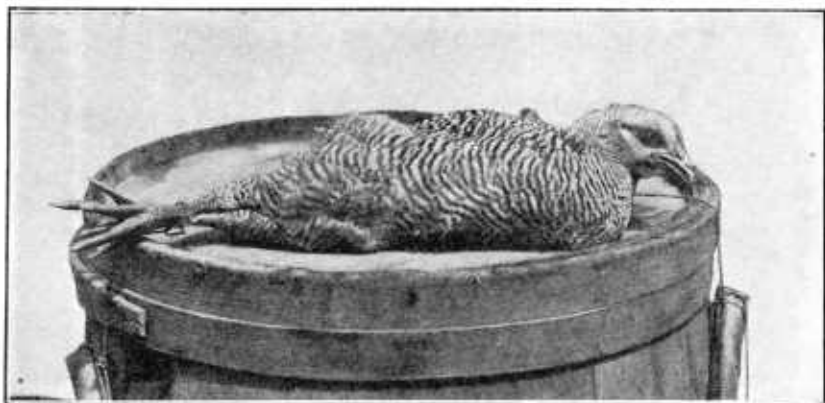


FIGURE 3.—Method of securing cockerel in position for the operation

Holding it thus, make the incision between the last two ribs (fig. 5), with the edge of the knife (fig. 1, E) away from you as you stand back of the fowl. Lengthen the incision in each direction until it is from 1 inch to  $1\frac{1}{2}$  inches long. Now insert the spreader (fig. 1,



FIGURE 4.—Feathers plucked away to make ready for incision. Before making the cut, the skin over the last two ribs is pulled down toward the thigh and held there while the incision is made. The cut in the skin is then not directly over the incision in the body

F or G) into the incision, thus springing the ribs apart, as shown in Figures 6 and 7. The intestines will now be visible, covered by a thin membrane called the omentum. Tear open this membrane with the hook, and the upper testicle, yellow or sometimes rather dark colored, and about the size and shape of a navy bean, should



be visible close up against the backbone. By pushing the intestines aside both testicles can easily be seen, the lower in a position similar to that occupied by the upper, but on the other side of the backbone. Expert operators sometimes remove both testicles through one incision. If both testicles are to be removed through the same in-



FIGURE 5.—The incision made. The skin must be held firmly with the left hand until the spreader is inserted

cision, remove the lower one first, as the bleeding from the upper may be sufficient to obscure the lower. Most operators will usually find it easier to remove the upper or nearer testicle and to make a second incision on the opposite side of the body in order to remove the other testicle.

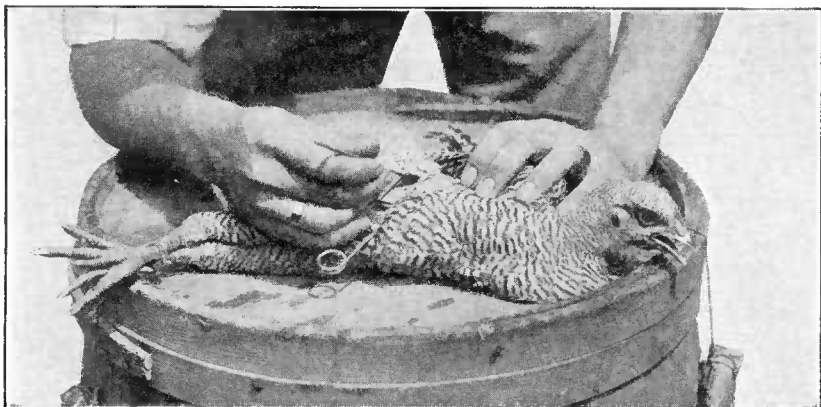


FIGURE 6.—Spreader in place. The next step is to tear open the membrane that covers the intestines

The delicate part of the operation is now at hand. It is delicate because of the close proximity of the spermatic artery, just back of the testicles and to which they are attached. If this artery is ruptured the chicken will bleed to death. The forceps are now used

to grasp the testicle without catching this artery. The operator should be careful to grasp the entire testicle, which is then removed by gradually twisting and tearing it away from the spermatic cord,

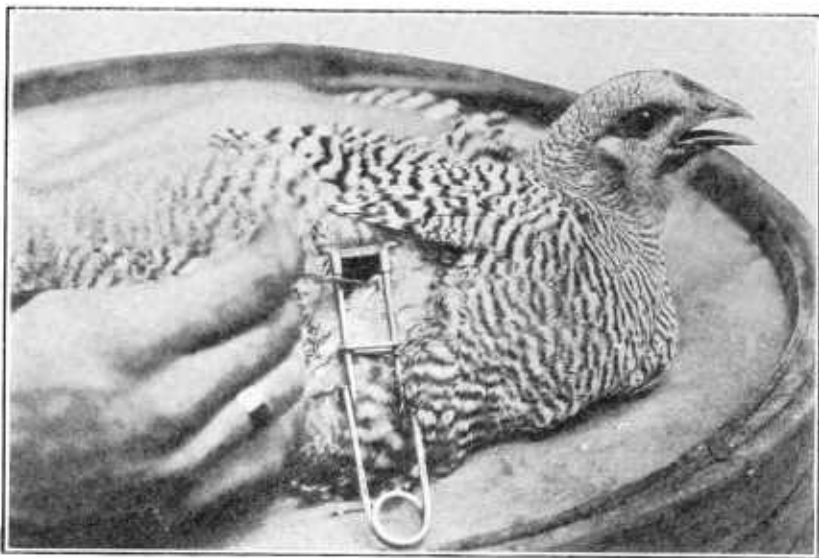


FIGURE 7.—The membrane removed, exposing the upper testicle to view. It lies close against the backbone and is about the size of a navy bean

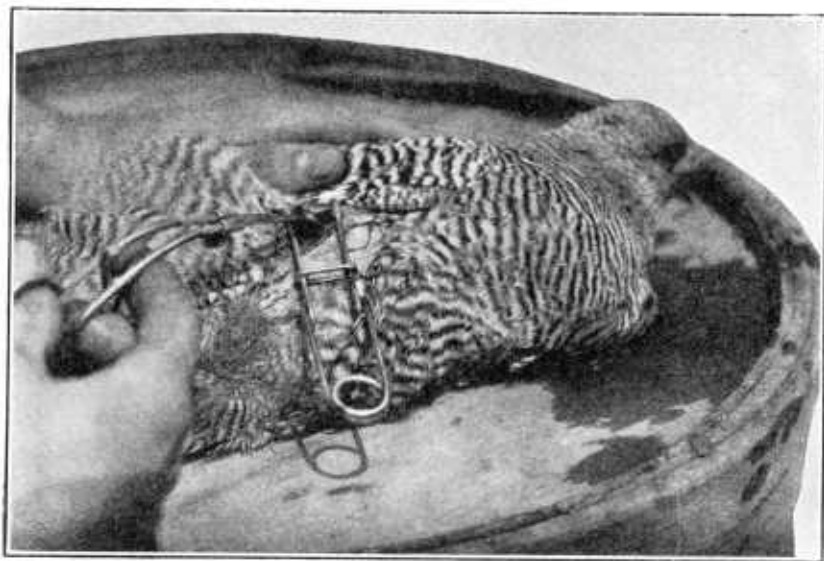


FIGURE 8.—Removing the testicle

as shown in Figure 8. If only the upper testicle is removed from one incision the bird is turned over and a similar operation is performed on the other side.

## LOSSES DUE TO CAPONIZING

Even experts kill some birds in caponizing but the loss is small, seldom exceeding 5 per cent where any considerable number are caponized, and usually not more than 2 or 3 per cent. With beginners, of course, the percentage is much larger, but with a little practice and care is soon reduced. Any fowls which may be killed in this way are perfectly good to eat.

A great deal of practice is required to become expert enough to operate rapidly. Consequently it is quite common in localities where many capons are grown to hire experts to do the work. These men



FIGURE 9.—After removing the testicle the spreader is removed and the weights taken off the wings. The skin slips back over the incision, thus closing the opening

are able to caponize a fowl in one to four minutes, and charge 4 to 8 cents a bird. The beginner should practice at first upon dead fowls in order to acquire skill before attempting to caponize a live bird.

## SLIPS

Many times, particularly when beginners perform it, the operation seems to be entirely satisfactory, but the bird will become what is known as a "slip," neither cockerel nor eapon, possessing the active disposition and appearance of an ordinary cockerel but being unable to reproduce. This condition occurs if a small piece of the testicle has been left in the body. This piece often grows to a considerable size. As the "slips" possess the same restless disposition as the cockerels, they grow and fatten little or no better, and bring only about the same price in the market as cockerels. In spite of the greatest care, "slips" are likely to occur, the percentage ranging from 50 per cent when the operation is performed by beginners down to 5 per cent for experts.

## CARE OF FOWLS AFTER THE OPERATION

After the operation the capons are usually kept in a small yard away from the other chickens and are fed moist mash for two or three days. As a rule, they show little effect of the operation and after a few days are put on regular rations without special attention. Many growers give them the ordinary growing rations and put them on range immediately without any special handling.

Air puffs may develop on some of the capons within a week or 10 days after the operation. These are caused by air gathering under the skin and puffing it out near the wound. The condition can be relieved readily by pricking the skin with a needle or knife and pressing out the air. A short piece of thread drawn through the air puffs, with the ends tied together, usually prevents their recurrence. This thread is left in the skin and soon disappears. Within 10 days after the operation the incision usually is completely healed.

## FEEDING AND GROWING CAPONS

Capons are fed the usual poultry-growing rations until they are 8 to 10 months old when they are marketed. A good growing mash may be made up as follows:

	Parts, by weight		Parts, by weight
Yellow corn meal-----	45	Alfalfa leaf meal-----	2
Middlings (or ground wheat)----	15	Ground limestone-----	2
Bran (or ground wheat)-----	10	Salt-----	1
Meat or fish meal-----	10		
Ground oats-----	10	Total-----	100
Dried milk-----	5		

A scratch feed of cracked corn and wheat is fed in addition to the mash, the amount being regulated so that about equal parts of mash and of scratch are consumed. Capons need free range on grass or alfalfa to make the most economical gains during their long growing period. Two or three weeks before they are marketed they may be fattened by increasing the corn and corn meal in their ration, either while they are on range or in moderately close confinement.

A fattening mash mixed with milk may be used during the last two weeks. Milk makes a very desirable addition to the fattening ration. Growing rations and fattening rations are described in Farmers' Bulletin 1541, Feeding Chickens.

Light, portable shelters such as are used for growing pullets make very desirable growing quarters for capons and can be used until the weather gets cold. Warmer houses should be provided as soon as the weather gets cold in the fall. As capons are of a quiet disposition they need only 2 or 3 square feet of floor space per fowl even when nearly full grown.

## PREPARING CAPONS FOR MARKET

The capons to be killed for market should be kept without feed for 24 hours before they are slaughtered, but should be given plenty of water. Capons usually are dry picked, although both the "slack scald" and the ordinary scalding methods are sometimes used. A

simple method of killing and dry picking is to hang the bird by the feet on a cord or on a wire shackle. The head is grasped in the left hand, the mouth opened, and the jugular vein in the throat is cut just below the base of the skull with one slash of a sharp, narrow-bladed knife. As soon as the cut has been made the point of the killing knife is plunged through the roof of the mouth into the brain and the capon is plucked immediately. The most common way of killing a capon for home use is to chop off its head.

The methods of killing and plucking capons are about the same as those used for other kinds of poultry and are described in detail in Farmers' Bulletin 1377, Marketing Poultry. Capons usually have

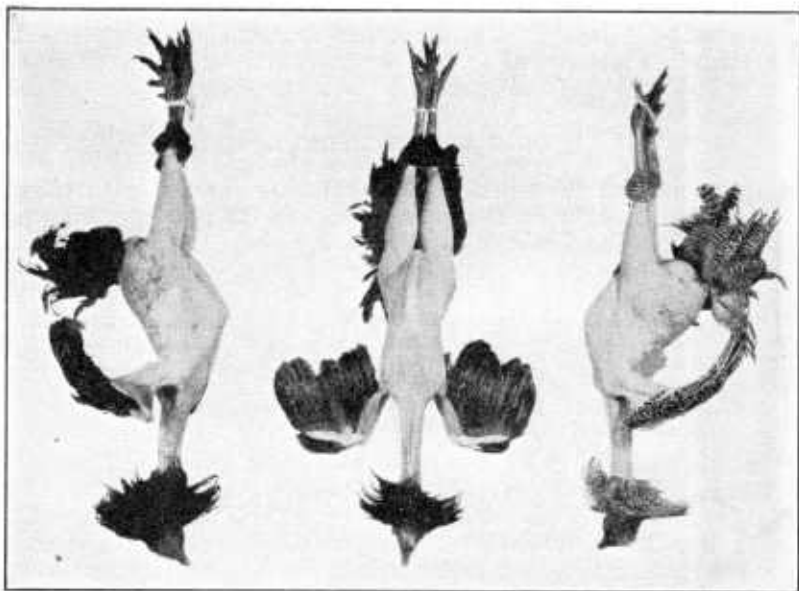


FIGURE 10.—Capon ready for market. Clean plucking is also practiced to meet the preference of some markets

the feathers left on the last joints of the wings, on the tail, and about one-fourth of the distance up the thighs and neck. (Fig. 10.) There is, however, a growing tendency to pluck capons clean, a desirable practice. Producers should use the method of plucking which meets their market demand. As capons bring relatively good prices it pays to pick them very carefully, taking care not to tear the skin. If bad tears are made they should be sewed up. All pin feathers should be removed and the capons made clean and attractive for market.

After the birds are plucked, they should be cooled promptly. As capons are marketed during the winter months, they are often hung out in the air to cool. If the air temperature is not low the birds should be cooled in cold water, preferably in ice water. After being thoroughly cooled they should be packed in barrels or in boxes holding a dozen birds, in which they are shipped to market. Unless the

weather is cold the plucked capons should be packed in ice for shipment. Many producers market their capons alive, shipping them in the regular poultry-shipping crates.

#### COST OF PRODUCTION AND RETURNS

Since capons are fed for nine months or longer before marketing, it is essential, as already mentioned, that they have a good range on which to develop. Such a range usually is available on general farms and if the birds are allowed to roam they will pick up part of their feed.

Since costs of growing and fattening fowls are often estimated on the amount of grain consumed, the following estimates may help in determining the cost of raising capons. At 6 months of age a Rhode Island Red capon will have consumed about 26 pounds of grain and mash. It takes from 7 to 8 pounds of feed a month to grow such a capon after it is 6 months old, so that at 9 months it will have eaten about 50 pounds of feed. The live weight at that age will be from 8 to 9 pounds. Breeds that grow larger than the Rhode Island Reds will consume more feed. The long growing period necessary for producing capons tends to make labor an important item in the cost of producing them, while the most efficient use of the houses and range should also be made. Another cost factor is the distance of the farm from market. The best prices for capons are obtained by producers who are near good markets and who sell direct to consumers. On the whole, the profits probably are greater for producers in the Eastern States than for those in other sections of the United States.

Market prices for capons are not so well stabilized as are those of some of the other classes of poultry. Some eastern cities, such as Philadelphia, New York, and Boston, are considered especially good markets for capons during the late winter months. During the last few years capon prices on the New York market have usually equaled turkey prices or exceeded them by a few cents a pound during the capon season, which commonly extends from early December to late in March. During the holiday season the prices of capons and of turkeys usually are about the same. Later in the winter capons often bring higher prices than turkeys. Capon prices are several cents a pound higher than the market quotations for chickens, the spread increasing as the capon season advances. Prices differ in different sections of the country so that information on prices being paid for capons in each locality should be obtained before caponizing any considerable number of cockerels. It may be advisable to caponize only the late-hatched cockerels because the early hatched birds usually bring fairly good prices as broilers. In fact most poultrymen prefer to market their cockerels as soon as they can be sold to advantage in order to give the pullets good growing conditions and also to reduce labor requirements.

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